scope of this study; instead, the existing values of the structures in their current locations are simply presented. However, a brief review of studies that attempt to assess these effects is provided in a separate section below to give some indication of their potential magnitude.

b) Road Infrastructure Value

The length (feet) of road infrastructure within each 30YRA and IRPs was determined using the county online GIS measuring tools. There are many types of road construction. For the purposes of this study, it is assumed that roads are typical 2-lane roads with 2-foot paved shoulders but without curbs, gutters, parking or sidewalks. This may not be accurate for all locations (for example, the road on the north end of Wrightsville beach has a bike lane on each side; however, this road was not in the 30YRA), but is typical for beach island roads in the study area. Road infrastructure was valued at current replacement cost. North Carolina Department of Transportation Construction Cost Estimates for 2008 were used to determine the typical cost of constructing such roads: $3 million per mile, or $568 per foot. The length of road within each 30YRA and IRPs was multiplied by $568 per foot to obtain the replacement cost value of road infrastructure.

c) Water Line Infrastructure Value

Coastal municipality Coastal Area Management (CAMA) plans were consulted to determine the locations and types of water line infrastructure within the 30YRAs and IRPs. These plans typically contain maps of water and sewer infrastructure locations. In general, water lines run along all streets in the 30YRAs and IRPs. As a result, the length (feet) of road infrastructure within each 30YRA or IRP was multiplied by an average per-foot cost of constructing typical, terminal water lines in coastal areas of $55/foot, based on discussions with engineers in the Cape Fear Public Utility Authority and Wrightsville Beach public works department.

d) Sewer Infrastructure Value

Coastal municipality Coastal Area Management (CAMA) plans were consulted to determine the locations and types of sewer line infrastructure within the 30YRAs and IRPs. In general, sewer lines run along all streets in the 30YRAs and IRPs. As a result, the length (feet) of road infrastructure within each 30YRA or IRP was multiplied by an average per-foot cost of constructing typical, terminal sewer lines in coastal areas. Discussions with engineers in the Cape Fear Public Utility Authority and Wrightsville Beach planning department produced an estimate of $150/foot.

e) Tax Values

The property tax base and property tax revenues originating from within each 30YRA and IRPs were determined based on the residential and commercial property values located within each 30YRA or for each IRP and the property tax rates applicable within in the respective county or municipality. Applicable property tax rates were obtained from the North Carolina Department of Revenue, Policy Analysis and Statistics Division, as given in the document "Property Tax Rates and Latest Year of Revaluation for North Carolina, Counties and Municipalities, Fiscal Year 2007-2008, Final Report," dated June